

Applicant: Keizo Takechi, et al.

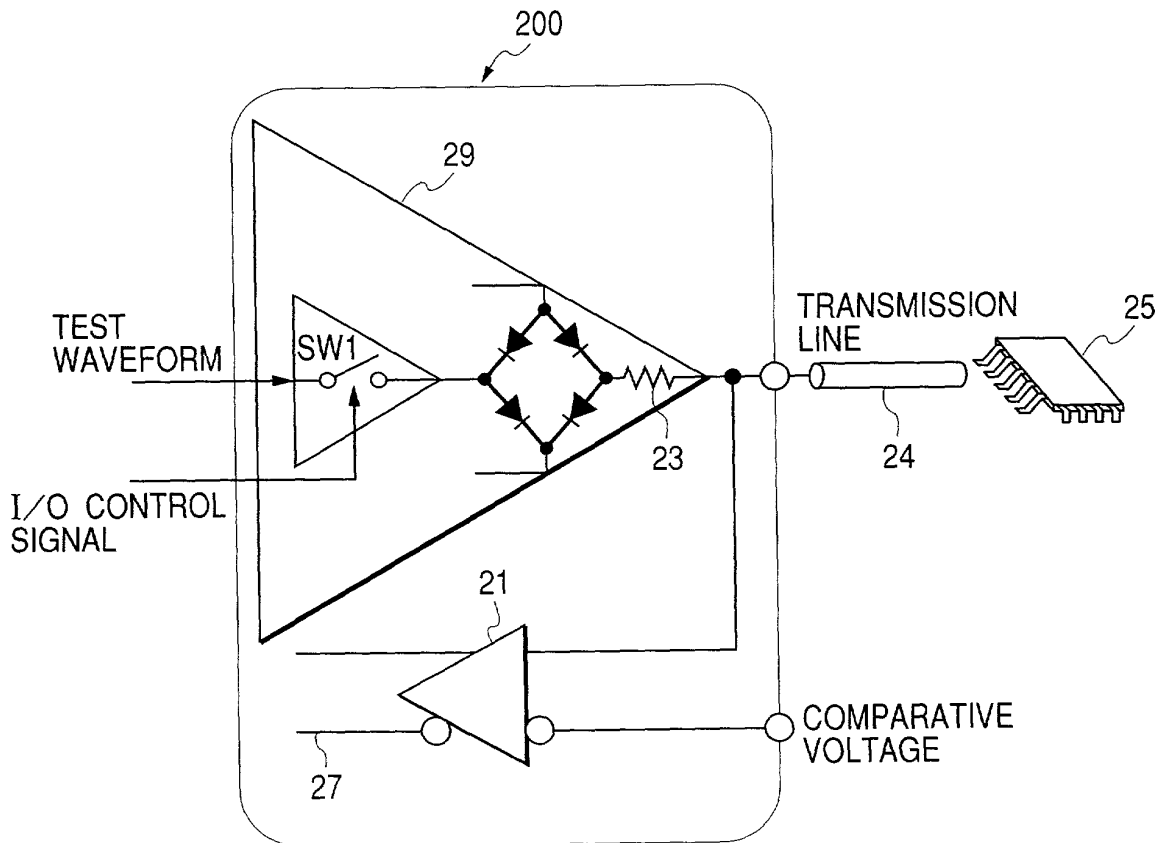
Title: Driver Circuit Integrated with Load Current Output Circuit, Pin...

Atty Docket No. 16869N-039000

Sheet 1 of 8

1 / 8

FIG. 1



10032761-32001

Applicant: Keizo Takechi, et al.

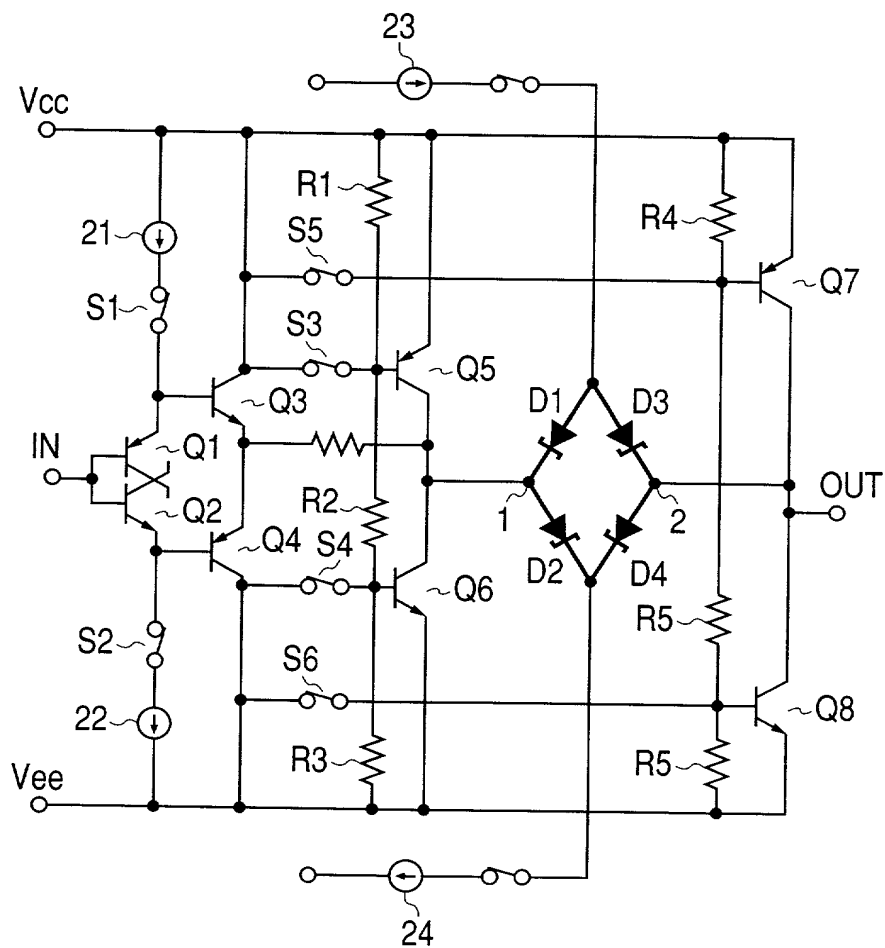
Title: Driver Circuit Integrated with Load Current Output Circuit, Pin...

Atty Docket No. 16869N-039000

Sheet 2 of 8

2 / 8

FIG. 2



Applicant: Keizo Takechi, et al.

Title: Driver Circuit Integrated with Load Current Output Circuit, Pin...

Atty Docket No. 16869N-039000

Sheet 3 of 8

3 / 8

FIG. 3A

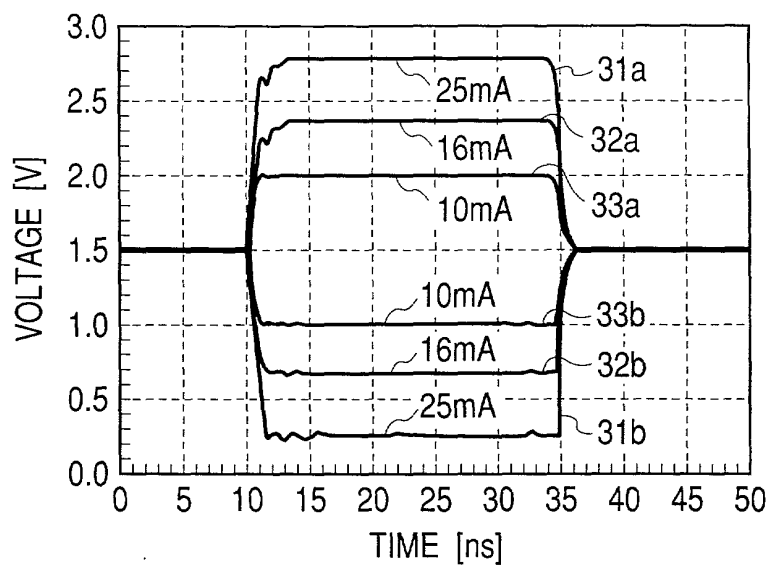
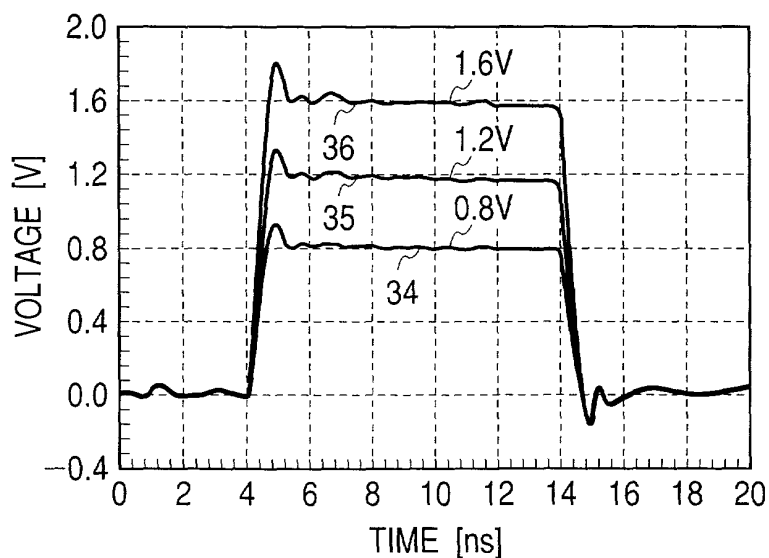


FIG. 3B



Applicant: Keizo Takechi, et al.

Title: Driver Circuit Integrated with Load Current Output Circuit, Pin...

Atty Docket No. 16869N-039000

Sheet 4 of 8

4 / 8

FIG. 4A

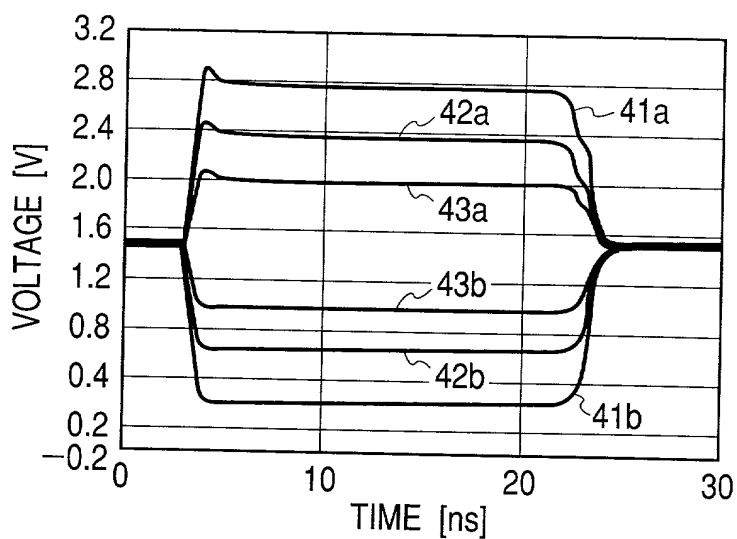
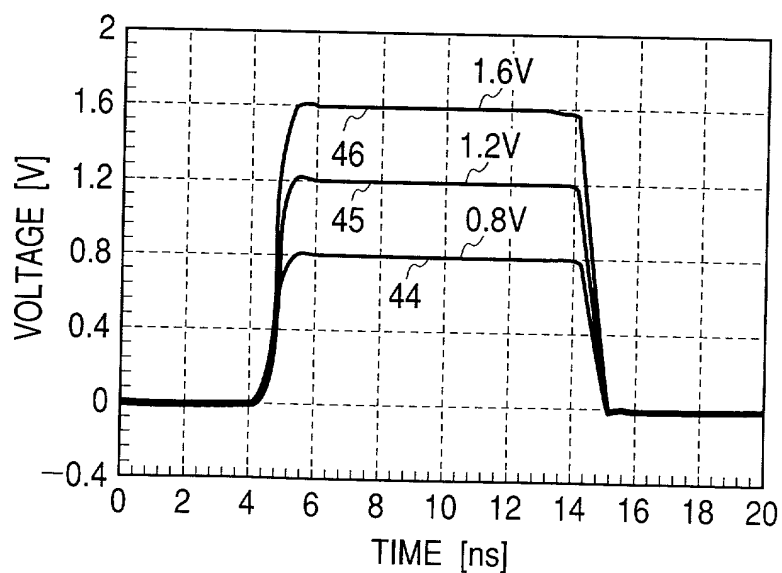


FIG. 4B



Applicant: Keizo Takechi, et al.

Title: Driver Circuit Integrated with Load Current Output Circuit, Pin...

Atty Docket No. 16869N-039000

Sheet 5 of 8

5 / 8

FIG. 5

ITEMS	INTEGRAL-TYPE DRIVER	CONVENTIONAL	
		DRIVER	DYNAMIC LOAD
ELECTRICITY CONSUMPTION	4.5W	3.6W 7.1W	3.5W
CHIP AREA [mm <sup>2</sup> ]	4.0×4.0 =16.0	3.7×3.7 =22.69	3.0×3.0
MOUNTING AREA [mm <sup>2</sup> ]	460	690	

FIG. 6

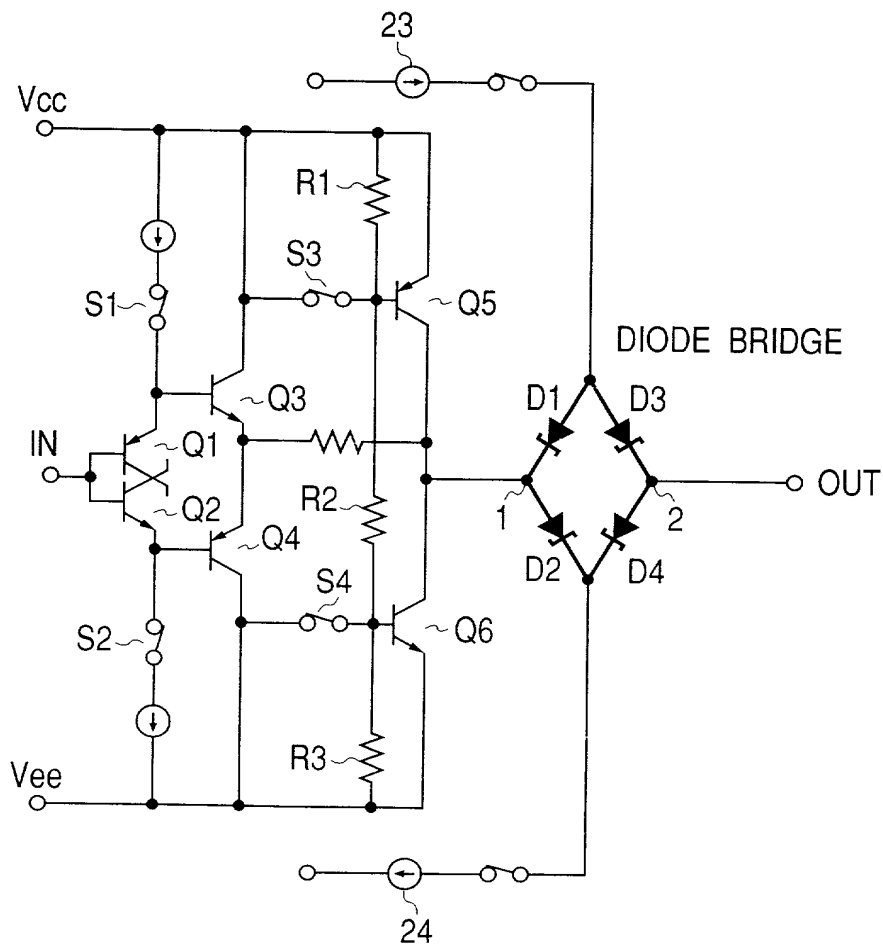
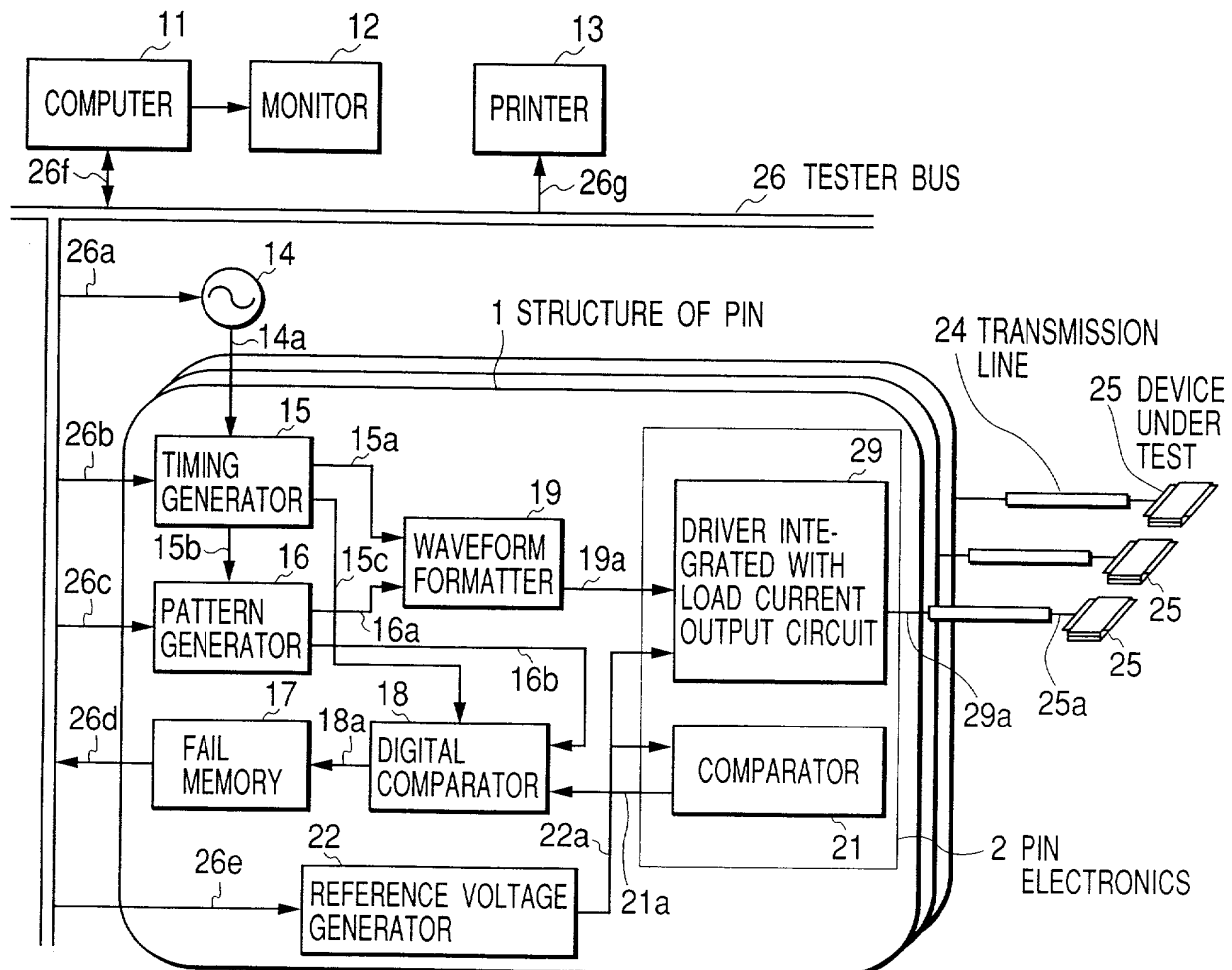


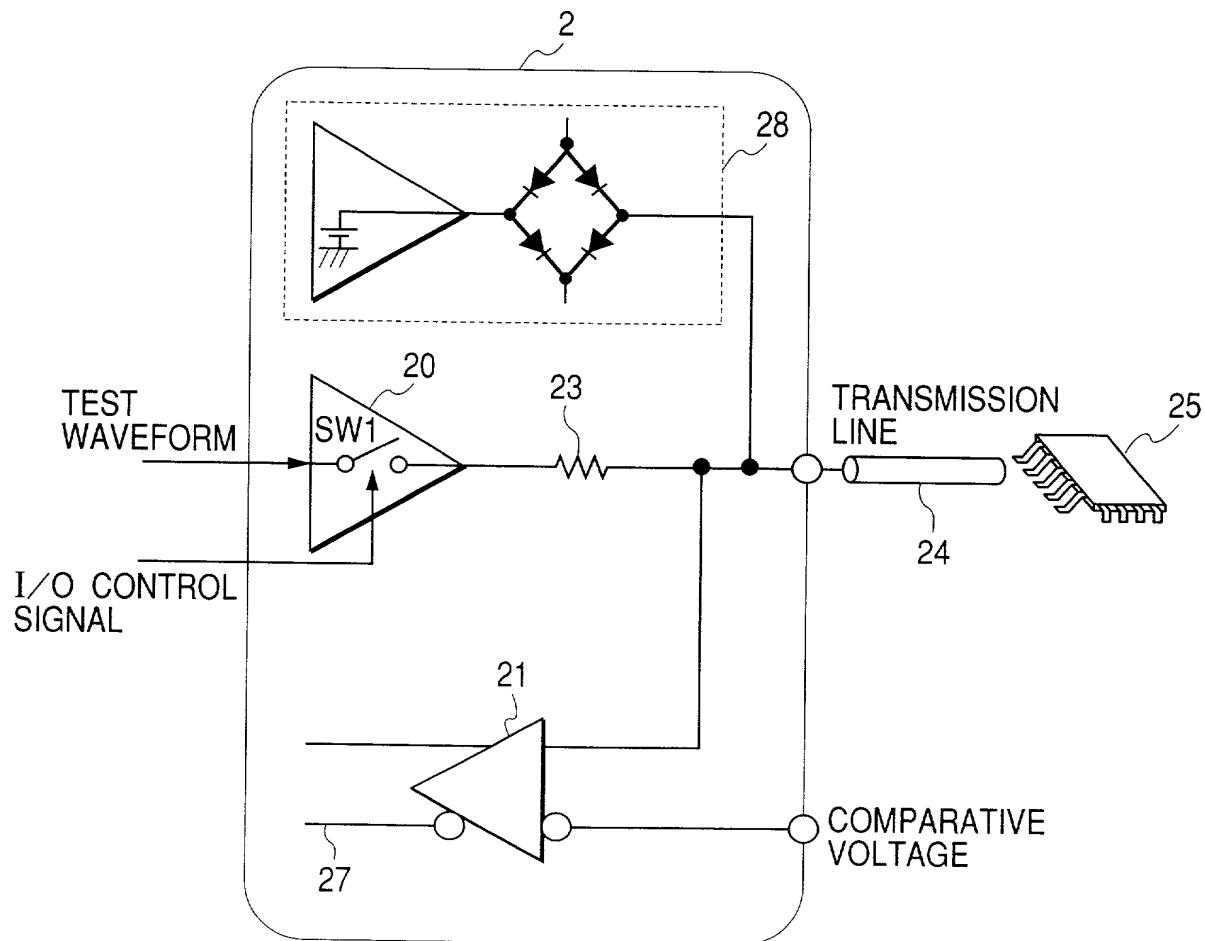
FIG. 7

ITEMS	CIRCUIT SYSTEM OF FIG. 2	CIRCUIT SYSTEM OF FIG. 3
ELECTRICITY CONSUMPTION	700mW	1500mW
CHIP AREA [mm <sup>2</sup> ]	0.7 (CONVENTIONALLY 1.0)	0.7 (CONVENTIONALLY 1.0)
RISING TIME (1.6V)	200ps	300ps

FIG. 8



# FIG. 9 PRIOR ART



Applicant: Keizo Takechi, et al.

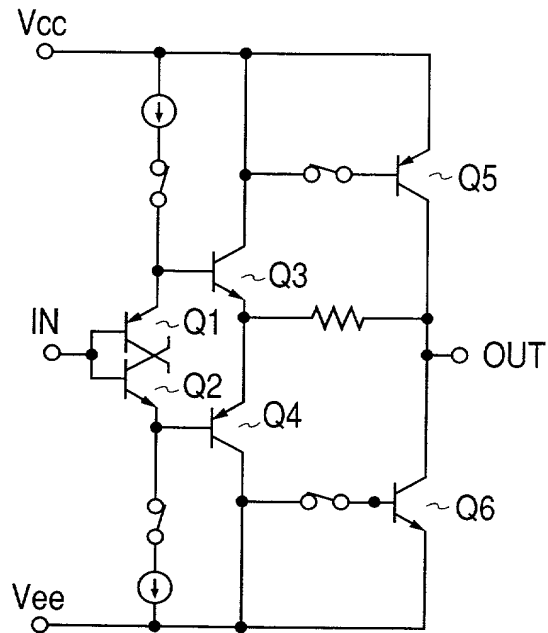
Title: Driver Circuit Integrated with Load Current Output Circuit, Pin...

Atty Docket No. 16869N-039000

Sheet 8 of 8

8 / 8

**FIG. 10**  
**PRIOR ART**



**FIG. 11**  
**PRIOR ART**

